

ITERATIVE SOFTWARE DEVELOPMENT ENVIRONMENT WITH PRIORITIZED BUILD RULES

ABSTRACT OF THE DISCLOSURE

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10 An iterative software development environment is provided to perform modified
dependency analyses for use in building a target file and all the files on which it
depends from one or more source files using a set of prioritized build rules. In one
embodiment, the build rules indicate how different types of target files can be generated
from different source file types. A given target file type may be associated with several
rules, each having a different priority, for building the target from different source file
types. In one embodiment, if more than one source file exists that can be used to
generate a given target file, the rule with the highest priority is used. In one
embodiment, the build environment identifies how to generate a particular target file by
15 identifying the highest priority rule for which an associated source file type exists.
Moreover, the development environment identifies the presence of a new source file
having a corresponding build rule with a higher priority than that of the source file
type(s) previously used in the generation of the target file. In one embodiment of the
invention, the target file is rebuilt if such a new source file is identified, or if one or more
20 source files previously used to build the target file are determined to have been modified
more recently than that indicated by the build date/time of the target file itself.